

Applicant Name Sweet Grass County Conservation District (SGCD)
Project Name West Boulder Point of Diversion Rehabilitation Project

Project Abstract

The SGCD, on behalf of the Boulder River Watershed Association (BRWA) requests \$40,455 in funding for rehabilitation of a diversion structure on the West Boulder River south of Big Timber. Like most diversion structures in the district, this structure is relatively small and shared by multiple users. The structure supplies a canal five miles long that irrigates 110 acres of cropland and 50 acres of pastureland. Crops are small grains rotated in every five to eight years, with alfalfa being the permanent cover crop. The pastureland is grazed by cow-calf pairs. For six months the diversion also provides livestock water to approximately 50 cow-calf pairs grazing native rangeland.

Due primarily to design deficiencies, the structure requires extensive maintenance that negatively impacts the integrity of the West Boulder River. Heavy equipment is frequently used in the channel to remove woody debris and accumulated sediment. These problems are the result of poor orientation of the structure to the main flow and deteriorated sediment transport capacities in the channel. Short-term repairs that have been performed to maintain grade at the structure exacerbate sedimentation problems and are at risk of failure.

SGCD proposes to obtain a grant to improve the infrastructure on the site that will provide long-term functionality with greatly reduced minimal maintenance. It is important to note that the West Boulder River watershed has an extensive system of such small structures, many of which have similar maintenance problems.

This project warrants funding because:

- Its visibility and representation of problems in the district make it an excellent local demonstration project for renewable resource management;
- The project will benefit Montana citizens by greatly reducing in-channel disturbance to valuable fish habitat; and
- It will result in a total savings in maintenance costs of approximately \$3,575/year or \$71,500 over 20 years.